

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A process ~~Process~~ for the production of a biocompatible crosslinked gel, comprising the steps of:

~~of~~ starting a crosslinking reaction of a predetermined quantity of at least one biocompatible polymer in solution by the addition of a quantity of crosslinking agent,

~~of~~ crosslinking said quantity of polymer,

~~of~~ adding a supplemental quantity of polymer of a molecular weight higher than 500,000 Da in solution with dilution of the reaction mixture so as to decrease the overall concentration of the polymer in solution, and of crosslinking, and

stopping the crosslinking reaction by elimination of the crosslinking agent.

2. (Currently Amended) The process ~~Process~~ according to claim 1, ~~characterized in that~~ wherein the step of starting a crosslinking reaction is carried out in a basic medium.

3. (Currently Amended) The process ~~Process~~ according to claim 1, ~~characterized in that~~ wherein the step of starting a crosslinking reaction is carried out in an acid medium.

4. (Currently Amended) The process ~~Process~~ according to claim 1, ~~characterized in that~~ wherein a supplemental quantity of crosslinking agent is added during the step of adding a supplemental quantity of polymer.

5. (Currently Amended) The process ~~Process~~ according to claim 1, ~~characterized in that~~ wherein the step of stopping the crosslinking reaction is carried out by dialysis.

6. (Currently Amended) The process ~~Process~~ according to claim 1, ~~characterized in that~~ wherein the polymers are of natural origin.

7. (Currently Amended) The process ~~Process~~ according to claim 6, ~~characterized in that~~ wherein the polymers of natural origin are compounds selected from the group consisting of: hyaluronic acid, ~~chondroitine~~ chondroitin sulfate, keratan, keratan sulfate, heparin, heparin sulfate, cellulose and its derivatives, alginates, xanthane, ~~carraghenin~~ carrageenan, proteins or nucleic acids.

8. (Currently Amended) The process ~~Process~~ according to claim 6, ~~characterized in that~~ wherein at least one of the polymers of natural origin is a polymer not naturally present in the human body, selected from the group consisting of: cellulose and its derivatives, alginates, xanthane, ~~carrageenin~~ carrageenan, and a polymer which is crosslinked with at least one polymer naturally present in the human body selected from the group consisting of: hyaluronic acid, ~~chondroitine~~ chondroitin sulfate, keratan, keratan sulfate, heparin, heparin sulfate, proteins or nucleic acids.

9. (Currently Amended) The process ~~Process~~ according to claim 1, ~~characterized in that~~ wherein the crosslinking agent is a ~~[[bi-]]~~ bifunctional or polyfunctional molecule comprising components selected from ~~the components of~~ the group consisting of epoxys, epihalohydrins and divinylsulfone.

10. (Currently Amended) A gel ~~Gel~~ prepared by the process according to claim 1.

11. (Currently Amended) The gel ~~Gel~~ according to claim 10, ~~characterized in that it constitutes a gel~~ comprising at least one dispersed active ingredient.

12. (Previously Presented) The use of a gel according to claim 10, to separate, replace or fill a biological tissue or increase the volume of said tissue or else to supplement or replace a biological fluid.

13. (Currently Amended) The process ~~Process~~ according to claim 2, ~~characterized in that~~ wherein a supplemental quantity of crosslinking agent is added during the step of adding a supplemental quantity of polymer.

14. (Currently Amended) The process ~~Process~~ according to claim 3, ~~characterized in that~~ wherein a supplemental quantity of crosslinking agent is added during the step of adding a supplemental quantity of polymer.

15. (Currently Amended) The process ~~Process~~ according to claim 2, ~~characterized in that~~ wherein the step of stopping the crosslinking reaction is carried out by dialysis.

16. (Currently Amended) The process ~~Process~~ according to claim 3, ~~characterized in that~~ wherein the step of stopping the crosslinking reaction is carried out by dialysis.

17. (Currently Amended) The process ~~Process~~ according to claim [[2]] 4, ~~characterized in that~~ wherein the step of stopping crosslinking is carried out by dialysis.

18. (Currently Amended) The process ~~Process~~ according to claim 2, ~~characterized in that~~ wherein the polymers are of natural origin.

19. (Currently Amended) The process ~~Process~~ according to claim 3, ~~characterized in that~~ wherein the polymers are of natural origin.

20. (Currently Amended) The process ~~Process~~ according to claim 4, ~~characterized in that~~ wherein the polymers are of natural origin.